



# Australian Bureau of Statistics

## 6206.0 - Labour Force Experience, Australia, Feb 2007

Previous ISSUE Released at 11:30 AM (CANBERRA TIME) 17/08/2007

---

## Summary

### Main Features

#### NOTES

##### ABOUT THIS PUBLICATION

This publication presents information about the labour force experience of people aged 15 years and over during the 12 months ending February 2007. It presents information about time spent in labour force activities, including episodes of working or looking for work, and time spent out of the labour force.

The statistics in this publication were compiled from data collected in the Labour Force Experience Survey conducted throughout Australia in February 2007 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS).

For this publication, labour force activity over a 12-month period was determined from a more limited set of questions than is used in the monthly Labour Force Survey (LFS). For this reason, the terms **worked** and **looked for work** are used, rather than the more precisely defined terms **employed** and **unemployed**, as used in the LFS. In this survey, the concepts **worked** and **looked for work** are used to determine whether a person was **in the labour force during the year**. Therefore, this concept is also based on a more limited set of questions than the Labour Force Survey.

Labour force experience relates to a person's labour force activities over a 12-month period. Labour force activity consists of either working or looking for work.

This survey measured the number of weeks people were engaged in these labour force activities during the year, the number of spells of looking for work during the year and the main activity of people when not in the labour force.

##### NOTES ABOUT THE ESTIMATES

The scope of the Labour Force Experience Survey was expanded in February 2007 to include all people aged 15 years and over. For previous surveys, the scope was restricted to people aged 15 to 69 years. All the results in this publication relate to all people aged 15 years and over, unless otherwise specified. This change has resulted in an extra 1,773,000

people coming within the scope of this survey. Users need to exercise care when comparing the estimates in this publication with previous releases.

From 2006, occupation data are classified according to the **ANZSCO - Australian and New Zealand Standard Classification of Occupations, First Edition 2006** (cat. no. 1220.0). The new classification replaces the **ASCO - Australian Standard Classification of Occupations, Second Edition, 1997** (cat. no. 1220.0). Data classified according to the ASCO are available on request.

Also from 2006, industry data are classified according to the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006** (cat. no. 1292.0). This new classification replaces the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993** (cat. no. 1292.0). Data classified according to the ANZSIC 1993 are available on request.

## ROUNDING

As estimates have been rounded, discrepancies may occur between sums of the component items and totals.

## INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Labour Market Statistics Section on Canberra (02) 6252 7206.

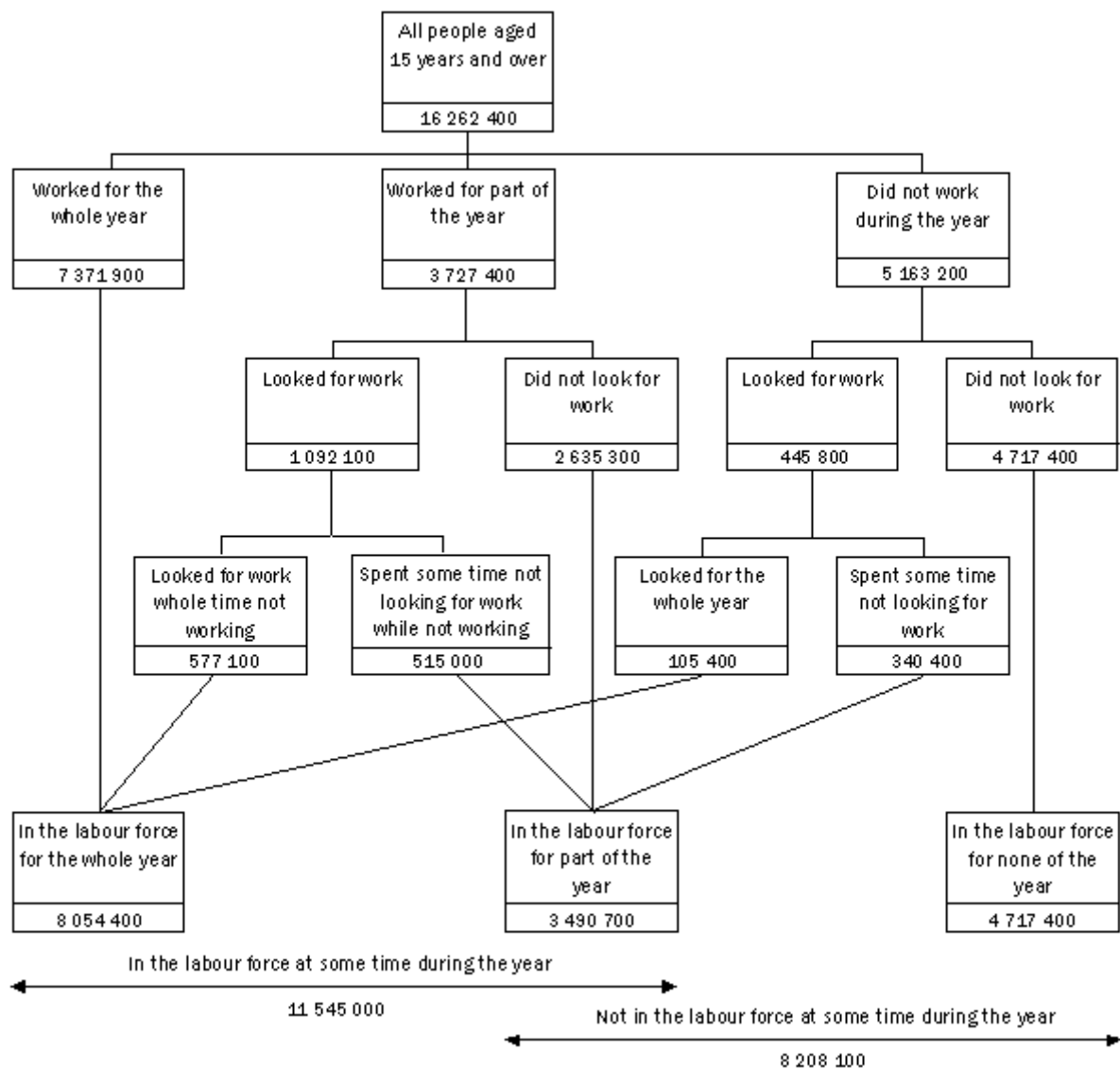
# Conceptual Framework

## CONCEPTUAL FRAMEWORK

The following diagram illustrates the conceptual framework for the Labour Force Experience Survey. People aged 15 years and over were classified according to their labour force activity over a 12-month period, that is, whether they were working or looking for work.

The framework firstly differentiates between people who worked for the whole year, part of the year or did not work during the year. People who worked part of the year or did not work during the year were asked whether they looked for work during the year. People who looked for work were also asked about the time they spent looking for work.

Note that the terms **worked** and **looked for work** are not the same as the more precisely defined terms **employed** and **unemployed**, which are used in the monthly Labour Force Survey to describe current labour force status. See the Glossary for the definitions of these terms.



## Summary of Findings

### SUMMARY OF FINDINGS

#### ALL PEOPLE

In February 2007, there were 16.3 million people aged 15 years and over (excluding institutionalised people, boarding school pupils and people in very remote parts of Australia). During the 12 months to February 2007, 75% of these people did not change their labour force status. Of those, 60% worked for the whole year, 39% were not in the labour force for the whole year and 1% looked for work for the whole year.

During the year ending February 2007:

- 11.1 million people worked at some time during the year, of whom 7.4 million spent the

whole year working

- 1.5 million people looked for work at some time during the year, of whom 105,400 spent the whole year looking for work
- 8.2 million people were not in the labour force at some time during the year, of whom 4.7 million spent no time in the labour force.

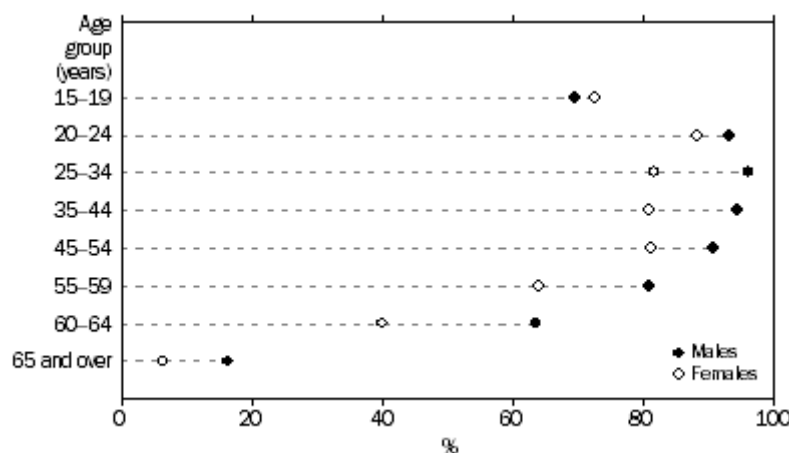
### Participation in the labour force

There were just over 11.5 million people aged 15 years and over in the labour force at some time during the year ending February 2007. That is, 71% of Australians aged 15 years and over either worked or looked for work at some time during the year.

Of men aged 15 years and over, 77% participated in the labour force at some time in the 12 months to February 2007. For women, the proportion participating in the labour force at some time during the year ending February 2007 was 65%.

The age group with the highest rate of participation in the labour force at some time during the year ending February 2007 were people aged 20-24 years (91%). For older people, the proportion participating in the labour force at some time during the year was 73% for those aged 55-59 years, 52% for those aged 60-64 years, and 11% for those aged 65 years and over.

### LABOUR FORCE PARTICIPATION DURING THE YEAR ENDING FEBRUARY 2007, Age - By sex



Men participated at higher rates than women in all age groups except for those aged 15-19 years in which women participated at a slightly higher rate (73%) than men (70%).

Of the people who were in the labour force at some time during the year, 70% spent the whole year in the labour force and 17% spent 39 to 51 weeks in the labour force.

### PEOPLE WHO WORKED AT SOME TIME DURING THE YEAR

There were 11.1 million people aged 15 years and over who worked at some time during the year ending February 2007. Of these, 6 million (54%) were men and 5.1 million (46%) were

women. Some 70% of these men worked for the entire 52 weeks, compared to 62% of women.

Of those people who worked at some time during the year ending February 2007:

- 65% worked full-time only (78% of men and 49% of women)
- 25% worked part-time only (14% of men and 39% of women)
- 10% worked a combination of full-time and part-time (8% of men and 12% of women).

Over three-quarters (79%) of people who worked full-time only worked for the whole year, compared to 41% of people who worked part-time only.

The majority of people who worked at some time during the year ending February 2007 had only one employer or business during that time (77%). Nearly one quarter (24%) of people who worked part-time only had two or more employers or businesses during the year, compared to 18% of people who worked full-time only.

## **PEOPLE WHO LOOKED FOR WORK AT SOME TIME DURING THE YEAR**

There were 1.5 million people aged 15 years and over who looked for work at some time during the year ending February 2007. These comprised approximately equal numbers of men (774,700) and women (763,200).

Of those people who looked for work at some time during the year ending February 2007:

- 21% looked for work for between 1 and 3 weeks
- 39% looked for work for between 4 and 12 weeks
- 16% looked for work for between 13 and 25 weeks
- 24% looked for work for between 26 and 52 weeks, including 7% who looked for the whole year.

The mean (average) duration of time spent looking for work was 15.7 weeks. On average, women who looked for work spent less time doing so (14.7 weeks) than men (16.7 weeks). People aged 55 years and over spent, on average, the most time looking for work (20.4 weeks), while people aged 15-19 years spent, on average, the least time (13.4 weeks).

Almost three-quarters (71%) of people who looked for work during the year had also worked during the year.

## **PEOPLE WHO WERE NOT IN THE LABOUR FORCE AT SOME TIME DURING THE YEAR**

There were 8.2 million people aged 15 years and over who were not in the labour force at some time during the year ending February 2007. Of these, 41% were men and 59% were women. Over half (57%) of the people aged 15 years and over who were not in the labour force at some time during the year ending February 2007 spent no time in the labour force during the year.

The following were the main activities most commonly reported by men, while not in the labour force:

- 'retired or voluntarily inactive' (30%)
- 'holiday, travel or leisure activities' (23%)
- 'attended an educational institution' (19%).

For women, the most commonly reported main activities were:

- 'home duties or child care' (39%)
- 'retired or voluntarily inactive' (21%)
- 'holiday, travel or leisure activities' (13%)
- 'attended an educational institution' (13%).

## **COMPARISONS WITH PREVIOUS SURVEYS**

Prior to 2007, the scope for the Labour Force Experience Survey was restricted to people aged 15 to 69 years, so direct comparisons between 2007 and previous years can only be made using this common population.

In February 2007, there were 14.5 million people aged 15 to 69 years (excluding institutionalised people, boarding school pupils and people in very remote parts of Australia). There were an estimated 11.4 million people aged 15 to 69 years who participated in the labour force at some time during the year ending February 2007. That is, 79% of Australians aged 15 to 69 years either worked or looked for work at some time during the year. This proportion has increased from 77% in 1997.

The proportion of men aged 15 to 69 years participating in the labour force at some time during the 12 months to February 2007 was 85%. This figure has remained relatively steady since 1997. For women, the proportion participating has steadily increased from 69% in 1999 to 73% in 2007.

There were 11 million people aged 15 to 69 years who worked at some time during the year ending February 2007. The proportion of men who worked at some time during the year has risen from 80% in 1997 to 82% in 2007. Similarly, the proportion of women who worked at some time during the year has steadily increased throughout that period from 64% in 1997 to 69% in 2007.

During the year ending February 2007, an estimated 772,700 men and 762,700 women aged 15 to 69 years spent some time looking for work. The proportion of men who looked for work at some time during the year has steadily decreased, from 17% in 1997 to 11% in February 2007. Similarly, the proportion of women who looked for work at some time during the year, has decreased from 13% in 1997 to 11% for the 12 months ending February 2007.

## **About this Release**

Provides information on the labour force experience of persons aged 15-69 during the year prior to the survey. Labour force experience can be described in terms of labour force activities undertaken by persons in a 12-month period, namely working and looking for work. Details include the number of weeks spent working, looking for work, or out of the labour force during the year. Estimates can be cross-classified by labour force demographics such as state, sex, age and marital status and birthplace.

# Explanatory Notes

## Explanatory Notes

### EXPLANATORY NOTES

#### INTRODUCTION

**1** The statistics in this publication were compiled from data collected in the Labour Force Experience Survey that was conducted throughout Australia in February 2007 as a supplement to the Australian Bureau of Statistics (ABS) monthly Labour Force Survey (LFS). Respondents to the LFS who were in scope of the supplementary survey were asked further questions.

**2** The publication **Labour Force, Australia** (cat. no. 6202.0) contains information about survey design, sample redesign, scope, coverage and population benchmarks relevant to the monthly LFS, which also apply to supplementary surveys. It also contains definitions of demographic and labour force characteristics, and information about telephone interviewing which are relevant to both the monthly LFS and supplementary surveys.

#### CONCEPTS SOURCES AND METHODS

**3** The conceptual framework used in Australia's LFS aligns closely with the standards and guidelines set out in Resolutions of the International Conference of Labour Statisticians. Descriptions of the underlying concepts and structure of Australia's labour force statistics, and the sources and methods used in compiling these estimates, are presented in **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001) which is available on the ABS website <<https://www.abs.gov.au>> (Methods, Classifications, Concepts & Standards).

#### SCOPE

**4** The scope of the LFS is restricted to people aged 15 years and over and excludes the following people:

- members of the permanent defence forces
- certain diplomatic personnel of overseas governments, customarily excluded from census and estimated populations
- overseas residents in Australia
- members of non-Australian defence forces (and their dependants).

**5** Students at boarding schools, patients in hospitals, residents of homes (e.g. retirement homes, homes for people with disabilities), and inmates of prisons are excluded from all supplementary surveys.

**6** This supplementary survey was conducted in both urban and rural areas in all states and territories, but excluded approximately 120,000 people living in very remote parts of Australia who would otherwise have been within the scope of the survey. The exclusion of these people will have only a minor impact on any aggregate estimates that are produced for individual states and territories, except the Northern Territory where such people account for over 23% of the population.

## **COVERAGE**

**7** The estimates in this publication relate to people covered by the survey in February 2007. In the LFS, coverage rules are applied which aim to ensure that each person is associated with only one dwelling and hence has only one chance of selection in the survey. See **Labour Force, Australia** (cat. no. 6202.0) for more details.

## **SAMPLE SIZE**

**8** Supplementary surveys are not always conducted on the full LFS sample. Since August 1994 the sample for supplementary surveys has been restricted to no more than seven-eighths of the LFS sample.

**9** The initial sample for the February 2007 LFS consisted of 41,663 private dwelling households and special dwelling units. Of the 33,989 private dwelling households and special dwelling units that remained in the survey after sample loss (e.g. households selected in the survey which had no residents in scope for the LFS, vacant or derelict dwellings and dwellings under construction), approximately 31,486 or 96.9% were fully responding to the Labour Force Experience Survey. The number of completed interviews obtained from these private dwelling households and special dwelling units (after taking into account scope, coverage and subsampling exclusions) was 54,689.

## **RELIABILITY OF THE ESTIMATES**

**10** Estimates in this publication are subject to sampling and non-sampling errors:

- Sampling error is the difference between the published estimate and the value that would have been produced if all dwellings had been included in the survey. For more information see the Technical Note.
- Non-sampling errors are inaccuracies that occur because of imperfections in reporting by respondents and interviewers and errors made in coding and processing data. These inaccuracies may occur in any enumeration, whether it be a full count or a sample. Every effort is made to reduce the non-sampling error to a minimum by careful design of questionnaires, intensive training and supervision of interviewers and efficient processing procedures.

## **SEASONAL FACTORS**

**11** The estimates are based on information collected in the survey month, and, due to



seasonal factors, may not be representative of other months of the year.

## CLASSIFICATIONS USED

**12** Country of birth data are classified according to the **Standard Australian Classification of Countries (SACC), 1998** (cat. no. 1269.0).

**13** From 2006, occupation data are now classified according to the **ANZSCO - Australian and New Zealand Standard Classifications of Occupations, First Edition, 2006** (cat.no. 1220.0). This new classification replaces the **ASCO - Australian Standard Classifications of Occupations, Second Edition, 1997** (cat.no. 1220.0). Data classified according to the ASCO are available on request.

**14** Also from 2006, industry data are classified according to **Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006** (cat.no. 1292.0). This new classification replaces the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 1993** (cat.no.1292.0). Data classified according to the ANZSIC 1993 are available on request.

## COMPARABILITY OF TIME SERIES

**15** Revisions are made to population benchmarks for the LFS after each five-yearly Census of Population and Housing. The last such revision was made in February 2004 to take account of the results of the 2001 Census of Population and Housing. Estimates from supplementary surveys conducted from and including February 2004 are therefore based on revised population benchmarks.

## COMPARABILITY WITH MONTHLY LFS STATISTICS

**16** Due to differences in the scope and sample size of this supplementary survey and that of the LFS, the estimation procedure may lead to some small variations between labour force estimates from this survey and those from the LFS.

## PREVIOUS SURVEYS

**17** Results of similar surveys, conducted in February 1969, 1973, 1975, 1976, 1977, annually from February 1979 to February 1989, annually from March 1990 to March 1994, and in February 1995, 1997, 1999, 2001, 2003 and 2005 have been given in previous issues of the publication **Labour Force Experience, Australia** (cat. no. 6206.0) and the Standard Data Service **Labour Force Experience on Hardcopy, Australia** (cat. no. 6206.0.40.001).

## NEXT SURVEY

**18** The ABS plans to conduct this survey again in February 2009.

## ACKNOWLEDGEMENT

**19** ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very

much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the **Census and Statistics Act 1905**.

## RELATED PUBLICATIONS

20 ABS publications which may also be of interest include:

- **Career Experience, Australia** (cat. no. 6254.0)
- **Job Search Experience, Australia** (cat. no. 6222.0)
- **Labour Force, Australia** (cat. no. 6202.0)
- **Labour Mobility, Australia** (cat. no. 6209.0)
- **Labour Statistics: Concepts, Sources and Methods** (cat. no. 6102.0.55.001)
- **Persons Not in the Labour Force, Australia** (cat. no. 6220.0)
- **Australian Labour Market Statistics** (cat. no. 6105.0).

21 Current publications and other products released by the ABS are available from the **Statistics Page** on the ABS website. The ABS also issues a daily **Release Advice** on the website which details products to be released in the week ahead.

## Glossary

### GLOSSARY

#### Employed

People aged 15 years and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind, in a job or business or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were:
  - away from work for less than four weeks up to the end of the reference week; or
  - away from work for more than four weeks up to the end of the reference week and received pay for some or all of the four week period to the end of the reference week; or
  - away from work as a standard work or shift arrangement; or
  - on strike or locked out; or
  - on workers' compensation and expected to return to their job; or
- were employers or own account workers who had a job, business or farm, but were not at work.

#### Industry of main job

In this publication, industry of main job refers to ANZSIC Division as classified according to the **Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006** (cat. no. 1292.0).

### **In the labour force at some time during the year**

People who had worked or looked for work for one week or more during the year. Note that the specific criteria used to determine whether a person was employed or actively looked for work, according to the LFS, were not applied.

### **In the labour force for the whole year**

People who had either worked or looked for work every week for the whole year. Note that the specific criteria used to determine whether a person was employed or actively looked for work, according to the LFS, were not applied.

### **In the labour force for part of the year**

People who had either worked or looked for work for one week or more during the year, but had some weeks when neither activity was undertaken. Note that the specific criteria used to determine whether a person was employed or actively looked for work, according to the LFS, were not applied.

### **Looked for work at some time during the year**

People who looked for work for one week or more during the year. Note that the specific criteria used to determine whether a person actively looked for work, according to the LFS, were not applied.

### **Main English-speaking countries**

Comprises the United Kingdom, Ireland, Canada, South Africa, the United States of America and New Zealand.

### **Mean duration of time spent looking for work**

Obtained by dividing the aggregate number of weeks a group has been looking for work by the number of people in that group.

### **Median duration of time spent looking for work**

The duration which divides people who looked for work into two equal groups, one comprising people whose time spent looking for work during the year is above the median, and the other, people whose time spent looking is below it.

### **Not in the labour force at some time during the year**

People who had neither worked nor looked for work for one week or more during the year. Note that the specific criteria used to determine whether a person was employed or actively looked for work, according to the LFS, were not applied.

### **Number of employers/businesses during the year**

The number of employers/businesses a person worked for during the year.

### **Number of spells of looking for work during the year**

The number of different periods, including the current period, during which a person was not working but was looking for a job.

### **Occupation of main job**

In this publication, occupation of main job refers to Major Group as defined by the **ANZSCO - Australian Standard Classification of Occupations, First Edition, 2006** (cat. no. 1220.0).

### **Time in the labour force during the year**

The total number of weeks a person reported having either worked or looked for work during the previous year. Note that the specific criteria used to determine whether a person was employed or actively looked for work, according to the LFS, were not applied.

### **Time not in the labour force during the year**

The total number of weeks a person reported having neither worked nor looked for work during the previous year. Note that the specific criteria used to determine whether a person was employed or actively looked for work, according to the LFS, were not applied.

### **Time spent looking for work during the year**

The total number of weeks a person spent looking for work, while not working.

### **Time worked during the year**

The total number of weeks a person reported having either worked or been on paid leave. Periods of one week or more on strike or time off without pay are not classified as time worked.

## **Time worked full time during the year**

The total number of weeks a person reported as having either worked or been on paid leave during the year, minus any weeks during the year where they reported working part time.

## **Time worked part time during the year**

The response given by a respondent to the question 'For how many weeks did you work part time?'.

## **Unemployed**

People aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full time or part time work at any time in the four weeks up to the end of the reference week and were available for work in the reference week; or
- were waiting to start a new job within four weeks from the end of the reference week and could have started in the reference week if the job had been available then.

## **Worked**

Activity in a job, business or farm, for pay, profit, commission or payment in kind; or any activity in a family business that contributed to the operation of that business although no payment was received. Includes being absent, but on paid leave, from such activity. Note that the specific criteria used to determine whether a person was employed, according to the LFS, were not applied.

## **Worked at some time during the year**

People who reported having worked and/or been on paid leave for one week or more during the year.

## **Worked for part of the year**

People who reported having worked and/or been on paid leave for part of the year.

# **Abbreviations**

## **ABBREVIATIONS**

The following symbols and abbreviations are used in this product:

'000	thousand
ABS	Australian Bureau of Statistics
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
ASCO	Australian Standard Classification of Occupations
LFS	Labour Force Survey
RSE	relative standard error
SACC	Standard Australian Classification of Countries
SE	standard error
wks	weeks

## Populations And Data Items List (Appendix 1)

### APPENDIX 1 POPULATIONS AND DATA ITEMS LIST

#### DATA AVAILABLE ON REQUEST

The ABS has a range of data available on request from the Labour Force Experience Survey. This section lists the data items and populations which relate to the survey. More detailed breakdowns of some data items may also be available on request.

The population(s) for a particular data item refers to the people in the survey to whom the data relates. Where alternative output categories are available for the same data item, these are shown and the data item name is followed by a bracketed numeral (e.g. Country of birth (2)).

For more information about ABS data available on request, contact Kerry O'Brien on Canberra (02) 6252 7246, or by facsimile on (02) 6252 7512, or by email to <kerry.obrien@abs.gov.au>.

#### POPULATION 1

All persons.

#### POPULATION 2

Persons in the labour force at some time during the year ending February 2007.

#### POPULATION 3

Persons who worked at some time during the year ending February 2007.

#### POPULATION 4

Persons who looked for work at some time during the year ending February 2007.

## POPULATION 5

Persons who were not in the labour force at some time during the year ending February 2007.

Data items		Populations
1	State or territory of usual residence	All
	New South Wales	
	Victoria	
	Queensland	
	South Australia	
	Western Australia	
	Tasmania	
	Northern Territory	
	Australian Capital Territory	
2	Area of usual residence	All
	Capital city	
	Balance of state/territory	
3	Region of usual residence	All
	Standard labour force dissemination regions	
4	Sex	All
	Males	
	Females	
5	Marital status	All
	Married	
	Not married	
6	Relationship in household	All
	Family member	
	Husband, wife or partner	
	With dependants	
	Without dependants	
	Lone Parent	
	With dependants	
	Without dependants	
	Dependent student	
	Non-dependent child	
	Other family person	
	Non-family member	
	Lone person	
	Not living alone	
	Relationship not determined	
7A	Country of birth and period of arrival	All
	Born in Australia	
	Born overseas	
	Arrived before 1971	
	Arrived 1971-1980	
	Arrived 1981-1990	
	Arrived 1991-2000	
	Arrived 2001 to survey date	
7B	Country of birth (1)	All
	Born in Australia	
	Born overseas	
	Born in main English-speaking countries	
	Born in other than main English-speaking countries	
7C	Country of birth (2)	All
	Born in Australia	
	Born overseas	

		Oceania and Antarctica North-West Europe Southern and Eastern Europe North Africa and the Middle East South-East Asia North-East Asia Southern and Central Asia Americas Sub-Saharan Africa	
8	Age group (years)		All
	15-19		
	20-24		
	25-34		
	35-44		
	45-54		
	55-59		
	60-64		
	65 and over		
	Note: Age collected in single years		
9	Labour force status at February 2007		All
	In the labour force		
	Working		
	Looking for work		
	Not in the labour force		
10	Status in employment at February 2007		All
	Working at February 2007		
	Employee		
	Employer		
	Own account worker		
	Contributing family worker		
	Not working at February 2007		
11	Full-time or part-time status at February 2007		All
	Working at February 2007		
	Full time		
	Part time		
	Not working at February 2007		
12	Industry at February 2007(a)		All
	Working at February 2007		
	Agriculture, forestry and fishing		
	Mining		
	Manufacturing		
	Electricity, gas, water and waste services		
	Construction		
	Wholesale trade		
	Retail trade		
	Accommodation and food services		
	Transport, postal and warehousing		
	Information media and telecommunications		
	Finance and insurance services		
	Rental, hiring and real estate services		
	Professional, scientific and technical services		
	Administrative and support services		
	Public administration and safety		
	Education and training		
	Health care and social assistance		
	Arts and recreation services		
	Other services		
	Not working at February 2007		
13	Occupation at February 2007(b)		All
	Working at February 2007		
	Managers		
	Professionals		
	Technicians and trade workers		
	Community and personal service workers		
	Clerical and administrative workers		



		Sales workers Machinery operators and drivers Labourers	
		Not working at February 2007	
14	Time in the labour force during the year		All
		In the labour force during the year	
		1 and under 4 weeks	
		4 and under 13 weeks	
		13 and under 26 weeks	
		26 and under 39 weeks	
		39 and under 52 weeks	
		52 weeks	
		In the labour force for none of the year	
15	Time worked during the year		All
		Worked at some time during the year	
		1 and under 4 weeks	
		4 and under 13 weeks	
		13 and under 26 weeks	
		26 and under 39 weeks	
		39 and under 52 weeks	
		52 weeks	
		Worked for none of the year	
16	Time not in the labour force during the year		All
		Not in the labour force at some time during the year	
		1 and under 4 weeks	
		4 and under 13 weeks	
		13 and under 26 weeks	
		26 and under 39 weeks	
		39 and under 52 weeks	
		52 weeks	
		In the labour force for the whole year	
17	Number of employers/businesses during the year		All
		None	
		One	
		Two	
		Three	
		Four or more	
18	Full-time or part-time status of time worked during the year		All
		Worked at some time during the year	
		All full time	
		More full time than part time	
		Full time same as part time	
		More part time than full time	
		All part time	
		Worked for none of the year	
19	Time spent looking for work during the year		All
		Looked for work at some time during the year	
		1 and under 4 weeks	
		4 and under 13 weeks	
		13 and under 26 weeks	
		26 and under 39 weeks	
		39 and under 52 weeks	
		52 weeks	
		Did not look for work during the year	
20	Number of spells of looking for work during the year		All
		None	
		One	
		Two	
		Three	
		Four or more	
21	Main activity when not in the labour force		All
		Not in the labour force at some time during the year	
		Retired or voluntarily inactive	
		Home duties or child care	
		Attended an educational institution	

		Own illness or injury	
		Own disability or handicap	
		Looking after ill or disabled person	
		Holiday, travel or leisure activities	
		Worked in an unpaid voluntary job	
		Other	
		In the labour force for the whole year	
22	Whether in the labour force at some time during the year		All
		In the labour force at some time during the year	
		For the whole year	
		For part of the year	
		In the labour force for none of the year	
23	Whether looked for work at some time during the year		All
		Looked for work at some time during the year	
		For the whole year	
		For part of the year	
		Did not look for work during the year	
24	Whether worked at some time during the year		All
		Worked at some time during the year	
		For the whole year	
		For part of the year	
		Worked for none of the year	
25	Time worked part time during the year		All
		Worked part time at some time during the year	
		1 and under 4 weeks	
		4 and under 13 weeks	
		13 and under 26 weeks	
		26 and under 39 weeks	
		39 and under 52 weeks	
		52 weeks	
		Did not work part time during the year	
26	Time worked full time during the year		All
		Worked full time at some time during the year	
		1 and under 4 weeks	
		4 and under 13 weeks	
		13 and under 26 weeks	
		26 and under 39 weeks	
		39 and under 52 weeks	
		52 weeks	
		Did not work full time during the year	
27	Whether had an unpaid absence from work during the year		All
		Working at February 2007	
		With current employer for one year or more	
		Had an unpaid absence from work	
		Did not have an unpaid absence from work	
		With current employer for less than one year	
		Had an unpaid absence from work	
		Did not have an unpaid absence from work	
		Not working at February 2007	
28	Time worked with current employer/business		All
		Working at February 2007	
		Under 12 months	
		Under 3 months	
		3 and under 6 months	
		6 and under 9 months	
		9 and under 12 months	
		1 and under 2 years	
		2 and under 3 years	
		3 and under 5 years	
		5 and under 10 years	
		10 years and over	
		10 and under 20 years	
		20 years and over	
		Not working at February 2007	

- (a) This data item is classified according to ANZSIC 2006. See paragraph 14 of the Explanatory Notes for more information.
- (b) This data item is classified according to ANZSCO First Edition. See paragraph 13 of the Explanatory Notes for more information.

## Supplementary Surveys (Appendix 2)

### APPENDIX 2 SUPPLEMENTARY SURVEYS

#### SUPPLEMENTARY SURVEYS

The Monthly Population Survey program collects data on particular aspects of the labour force. The following is an historical list of supplementary surveys to the monthly labour force survey. Data from these surveys are available on request and can be obtained by contacting the ABS.

	cat. no.	Frequency	Latest issue
Barriers and Incentives to Labour Force Participation, Australia	6239.0	Biennial	2004-2005
Career Experience, Australia	6254.0	Discontinued	November 2002
Career Paths of Persons with Trade Qualifications, Australia	6243.0	Discontinued	Final issue 1993
Child Care, Australia	4402.0	Irregular	June 2005
Child Employment , Australia	6211.0	Irregular	June 2006
Education and Work, Australia	6227.0	Annual	May 2006
Employee Earnings, Benefits, and Trade Union Membership, Australia	6310.0	Annual	August 2006
Forms of Employment, Australia	6359.0	Irregular	November 2006
Job Search Experience, Australia	6222.0	Annual	July 2006
Labour Force Experience, Australia	6206.0	Biennial	February 2007
Labour Force Status and Educational Attainment, Australia	6235.0	Discontinued	Final issue 1994
Labour Force Status and Other Characteristics of Families, Australia(a)	6224.0	Discontinued	Final issue 2000
Labour Force Status and Other Characteristics of Migrants, Australia	6250.0	Irregular	November 2004
Labour Mobility, Australia	6209.0	Biennial	February 2006
Locations of Work, Australia	6275.0	Irregular	November 2005
Multiple Jobholding, Australia(b)	6216.0	Irregular	August 1997
Participation in Education, Australia	6272.0	Discontinued	Final issue 1999
Persons Not in the Labour Force, Australia	6220.0	Annual	September 2006
Persons Who had Re-entered the Labour Force, Australia	6264.0.40.001	Discontinued	Final issue 1995
Persons Who Have Left the Labour Force, Australia	6267.0.40.001	Discontinued	Final issue 1994
Retirement and Retirement Intentions, Australia	6238.0	Biennial	2004-2005
Retrenchment and Redundancy, Australia	6266.0	Discontinued	July 2001
Successful and Unsuccessful Job Search Experience, Australia	6245.0	Discontinued	Final issue 2000
Superannuation, Australia	6319.0	Discontinued	Final issue 1995
Underemployed Workers, Australia	6265.0	Annual	September 2006
Working Time Arrangements, Australia(c)	6342.0	Irregular	November 2006
Work-Related Injuries, Australia	6324.0	Irregular	2005-2006

(a) Latest data available June 2003, from the ABS web site cat. no. 6291.0.55.001 annual, or on request.

(b) Latest data available on request July 2001.

(c) This product replaces the publication Working Arrangements, Australia (cat. no. 6342.0).

## Data Quality (Technical Note)

# TECHNICAL NOTE DATA QUALITY

## INTRODUCTION

**1** Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability. That is, they may differ from those estimates that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about two chances in three (67%) that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs. Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

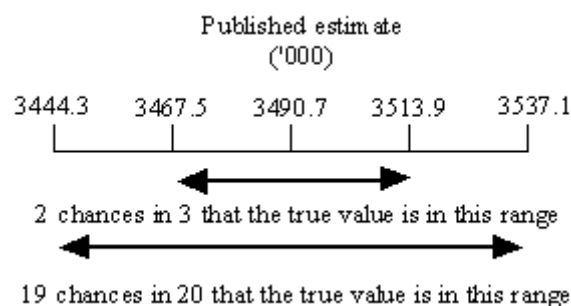
**2** Due to space limitations, it is impractical to print the SE of each estimate in the publication. Instead, a table of SEs is provided to enable readers to determine the SE for an estimate from the size of that estimate (see table T1). The SE table is derived from a mathematical model, referred to as the 'SE model', which is created using data from a number of past Labour Force Surveys. It should be noted that the SE model only gives an approximate value for the SE for any particular estimate, since there is some minor variation between SEs for different estimates of the same size.

## CALCULATION OF STANDARD ERRORS

**3** An example of the calculation and the use of SEs in relation to estimates of people is as follows. Table 3 shows that the estimated number of people aged 15 years and over in the labour force for part of the year was 3,490,700. Since this estimate is between 2,000,000 and 5,000,000, table T1 shows that the SE for Australia will lie between 17,150 and 29,250 and can be approximated by interpolation using the following general formula:

$$\begin{aligned} & \text{SE of estimate} \\ &= \text{lower SE} + \left( \left( \frac{\text{size of estimate} - \text{lower estimate}}{\text{upper estimate} - \text{lower estimate}} \right) \times (\text{upper SE} - \text{lower SE}) \right) \\ &= 17,150 + \left( \left( \frac{3,490,700 - 2,000,000}{5,000,000 - 2,000,000} \right) \times (29,250 - 17,150) \right) \\ &= 23,200 \text{ (rounded to the nearest 100)} \end{aligned}$$

**4** Therefore, there are about two chances in three that the value that would have been produced, if all dwellings had been included in the survey, will fall within the range 3,467,500 to 3,513,900, and about 19 chances in 20 that the value will fall within the range 3,444,300 to 3,537,100. This example is illustrated in the diagram below.



**5** In general, the size of the SE increases as the size of the estimate increases. Conversely, the RSE decreases as the size of the estimate increases. Very small estimates are thus subject to such high RSEs that their value for most practical purposes is unreliable. In the tables in this publication, only estimates with RSEs of 25% or less are considered reliable for most purposes. Estimates with RSEs greater than 25% but less than or equal to 50% are preceded by an asterisk (e.g. \*3.4) to indicate they are subject to high SEs and should be used with caution. Estimates with RSEs of greater than 50%, preceded by a double asterisk (e.g. \*\*0.3), are considered too unreliable for general use and should only be used to aggregate with other estimates to provide derived estimates with RSEs of 25% or less.

## MEANS AND MEDIANS

**6** The RSEs of estimates of mean and median duration of time spent looking for work are obtained by first finding the RSE of the estimate of the total number of people contributing to the estimate (see table T1) and then multiplying the resulting number by the following factors:

- mean duration of time spent looking for work (weeks): 0.76
- median duration of time spent looking for work (weeks): 1.63

**7** The following is an example of the calculation of SEs where the use of a factor is required. Table 11 shows that the estimated number of males aged 15 years and over looking for work at some time during the year was 774,700 with a median duration of time spent looking for work of 10 weeks. The SE of 774,700 can be calculated from table T1 (by interpolation) as 10,000. To convert this to an RSE we express the SE as a percentage of the estimate, or  $10,000/774,700 = 1.3\%$ .

**8** The RSE of the estimate of median duration of time spent looking for work for males aged 15 years and over is calculated by multiplying this number (1.3%) by the appropriate factor shown in the previous paragraph (in this case 1.63):  $1.3 \times 1.63 = 2.1\%$ . The approximate SE of this estimate of median duration of time spent looking for work for males aged 15 years and over is therefore 2.1% of 10 weeks, i.e. about 0.2 weeks. Therefore, there are two chances in three that the median duration of time spent looking for work for males aged 15 years and over that would have been obtained if all dwellings had been included in the survey would have been within the range 9.8 weeks to 10.2 weeks, and about 19 chances in 20 that it would have been within the range 9.6 weeks to 10.4 weeks.

**9** Estimates of means and medians produced from population estimates smaller than the values provided in table T2 have RSEs larger than 25% and should be used with caution. Table T2 also indicates the size of population estimates that would produce means and

medians with RSEs greater than 50%, which are considered too unreliable for general use.

## PROPORTIONS AND PERCENTAGES

**10** Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below. This formula is only valid when x is a subset of y.

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

**11** Considering the example from the previous page, of the 3,490,700 people aged 15 years and over in the labour force for part of the year, 515,000, or 14.8%, looked for work at some time during the year. The SE of 515,000 may be calculated by interpolation as 8,200. To convert this to an RSE we express the SE as a percentage of the estimate, or  $8,200/515,000 = 1.6\%$ . The SE for 3,490,700 was calculated previously as 23,200, which converted to an RSE is  $23,200/3,490,700 = 0.7\%$ . Applying the above formula, the RSE of the proportion is:

$$RSE = \sqrt{(1.6)^2 - (0.7)^2} = 1.4\%$$

**12** Therefore, the SE for the proportion of people aged 15 years and over who looked for work at some time during the year is 0.2 percentage points  $(=(14.8/100) \times 1.4)$ . Therefore, there are about two chances in three that the proportion of people aged 15 years and over who looked for work at some time during the year is between 14.6% and 15%, and 19 chances in 20 that the proportion is within the range 14.4% to 15.2%.

## DIFFERENCES

**13** Published estimates may also be used to calculate the difference between two survey estimates (of numbers or percentages). Such an estimate is subject to sampling error. The sampling error of the difference between two estimates depends on their SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

**14** While this formula will only be exact for differences between separate and uncorrelated characteristics or subpopulations, it is expected to provide a good approximation for all differences likely to be of interest in this publication.

## STANDARD ERRORS

Size of estimate (persons)	NSW no.	Vic. no.	Qld no.	SA no.	WA no.	Tas. no.	NT no.	ACT no.	AUST.	
									SE no.	RSE %
100	290	250	250	150	160	100	90	140	100	100.0
200	380	330	330	210	220	140	140	180	180	90.0
300	440	390	390	250	260	180	170	200	240	80.0
500	540	470	470	300	330	220	230	230	350	70.0
700	620	540	540	350	380	260	270	260	430	61.4
1000	710	620	610	400	440	300	320	280	540	54.0
1500	830	730	710	470	520	340	380	320	690	46.0
2000	920	810	790	530	590	370	420	340	820	41.0
2500	1 000	900	850	550	650	400	450	350	900	36.0
3000	1 100	950	900	600	700	400	500	400	1 000	33.3
3500	1 150	1 000	950	650	750	450	500	400	1 100	31.4
4000	1 200	1 050	1 000	700	750	450	500	400	1 200	30.0
5000	1 300	1 150	1 100	750	850	500	550	450	1 300	26.0
7000	1 500	1 300	1 250	850	950	550	700	500	1 550	22.1
10000	1 700	1 500	1 400	950	1 100	650	850	600	1 800	18.0
15000	2 000	1 750	1 600	1 100	1 250	800	1 150	750	2 100	14.0
20000	2 200	1 950	1 800	1 200	1 400	950	1 450	850	2 300	11.5
30000	2 600	2 300	2 050	1 450	1 600	1 250	1 950	1 100	2 650	8.8
40000	2 850	2 550	2 250	1 700	1 750	1 500	2 500	1 350	2 900	7.3
50000	3 100	2 800	2 450	1 900	1 950	1 750	2 950	1 500	3 100	6.2
100000	4 050	3 600	3 400	2 900	3 050	2 600	5 300	2 050	4 000	4.0
150000	4 800	4 350	4 250	3 700	4 100	3 200	7 500	2 350	4 700	3.1
200000	5 550	5 200	5 100	4 400	4 950	3 650	9 700	2 450	5 300	2.7
300000	7 100	6 800	6 800	5 450	6 250	4 300	14 050	2 550	6 350	2.1
500000	9 950	9 300	9 550	6 900	7 950	5 150	..	..	8 100	1.6
1000000	14 950	13 700	13 500	9 000	10 050	6 250	..	..	11 600	1.2
2000000	21 350	19 350	16 550	11 000	11 400	..	..	..	17 150	0.9
5000000	31 500	28 550	17 350	13 000	11 500	..	..	..	29 250	0.6
10000000	39 750	36 450	15 250	..	..	..	..	..	39 200	0.4
15000000	..	..	..	..	..	..	..	..	44 050	0.3
20000000	..	..	..	..	..	..	..	..	46 700	0.2

.. not applicable

## T2 Levels at which estimates have relative standard errors of 25% and 50%(a)

	NSW no.	Vic. no.	Qld no.	SA no.	WA no.	Tas. no.	NT no.	ACT no.	Aust. no.
25% RSE									
Mean duration of time spent looking for work	3 500	2 800	2 700	1 400	1 700	800	900	800	3 200
Median duration of time spent looking for work	11 900	9 800	8 700	4 700	5 800	2 700	3 100	2 400	12 800
All other estimates	5 400	4 400	4 100	2 200	2 600	1 300	1 500	1 200	5 500
50% RSE									
Mean duration of time spent looking for work	1 100	900	900	400	500	200	200	300	600
Median duration of time spent looking for work	3 900	3 200	3 000	1 600	1 900	900	1 100	900	3 700
All other estimates	1 800	1 400	1 400	700	800	400	400	400	1 200

(a) Refers to the number of people contributing to the estimate.

© Commonwealth of Australia

All data and other material produced by the Australian Bureau of Statistics (ABS) constitutes Commonwealth copyright administered by the ABS. The ABS reserves the right to set out the terms and conditions for the use of such material. Unless otherwise noted, all material on this website – except the ABS logo, the Commonwealth Coat of Arms, and any material protected by a trade mark – is licensed under a Creative Commons Attribution 2.5 Australia licence